Amendments to the Specification:

For simplicity, all citations to the specification will refer to the paragraph numbers used in the application's Patent Application Publication, US 2004/0160360A1.

Please replace paragraph [0020], with the following amended paragraph:

[0020]   where (x_k, y_k, z_k) is position coordinate information of a k-th satellite, x_k is an <u>Earth-Centered, Earth-Fixed (ECEF)</u> X-axis coordinate after the lapse of a predetermined time t_k indicative of time variance, y_k is a <u>ECEF</u> Y-axis coordinate after the lapse of t_k, z_k is a <u>ECEF</u> Z-axis coordinate after the lapse of t_k, x_p is an X-axis ~~velocity~~ component of the satellite <u>velocity</u>, y_p is a Y-axis ~~velocity~~ component of the satellite <u>velocity</u>, z_p is a Z-axis ~~velocity~~ component of the satellite <u>velocity</u>, Ω is an argument of perigee, and i_k is a variation in inclination angle of a satellite orbit after the lapse of t_k.